Before the
Federal Communications Commission
Washington D.C. 20554

In the Matter of	)	
	)	CG Docket No. 03-123
Telecommunications Relay Services and	)	
Speech-to-Speech For Individuals with	)	
Hearing and Speech Disabilities	)	WC Docket No. 05-196
	)	
E911 Requirements for IP-Enabled Service	)	
Providers	)	
	)	

COMMENTS OF ULTRATEC, INC. ON
FURTHER NOTICE OF PROPOSED RULEMAKING
UNIFORM NUMBERING SYSTEM
FOR IP CTS RELAY USERS

I. Introduction

Ultratec, Inc. (Ultratec) is filing these comments in response to the Federal Communications Commission's (FCC or Commission) Further Notice of Proposed Rulemaking seeking guidance on the implementation of a uniform numbering system for IP-based relay users. On June 11, 2008, the FCC adopted a Report and Order requiring IP-based relay providers to distribute ten-digit telephone numbers to IP relay (text-based) and video relay service (VRS) users by December 31, 2008.[1] At that time, the Commission refrained from extending these requirements to IP captioned telephone service (IP CTS) because, it explained, these services raise

[1] In the Matter of Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities, E911 Requirements for IP-Enabled Service Providers, Report and Order and Further Notice of Proposed Rulemaking, CG Dkt No. 03-123; WC Dkt No. 05-196, FCC 08-151 (June 24, 2008) (Numbering Order).

"distinct technical and regulatory issues in the context of numbering"[2] and there is "insufficient information on the record on this form of Internet-based TRS."[3]

II. Ultratec Supports Uniform Ten-Digit Numbering and User Registration

Ultratec wholeheartedly supports the distribution of ten-digit numbers for all TRS users, including IP CTS users. From the very start, it has been Ultratec's goal to provide a form of relay service that is as transparent as possible, so that individuals using captioned telephone services have a telephone experience that is truly functionally equivalent to the conventional voice telephone services used by hearing people. Equivalent numbering is an essential component to achieving this objective. For example, individuals who use captioned telephone relay services over the PSTN are already able to directly dial the numbers of individuals that they want to call, rather than having to first go through 711 or an 800 relay number. Similarly, 2-line captioned telephone relay service users can receive incoming calls directly to their ten-digit numbers, without requiring the calling party to dial through a relay service.[4] Ongoing feedback from captioned telephone customers attest to the benefits of not having to first dial an intermediary in order to complete a captioned telephone call. WebCaptel users (or IP CTS users) should similarly be able to benefit from the same type of call transparency by having ten-digit numbers.[5] Provided that the unique technical distinctions of IP CTS discussed

[2] *Id.* at ¶11, n.5.
[3] *Id.* at ¶116.
[4] Incoming calls to single line captioned telephone users must still be made by first dialing the captioning service.
[5] WebCaptel is one form of IP CTS.

below are addressed, Ultratec believes that this service will be able to map ten-digit numbers to IP addresses.

Ultratec also supports the FCC's decision to require registration by IP-based relay users as this will, as the FCC suggests, help to curb fraudulent and abusive calls.

A WebCaptel user registers by providing their name, street address, city, state, zip code, and an email address. As part of registration, WebCaptel users create a User ID and password and fill in a verification code. They also "accept" a usage policy stating that they have a hearing loss and need the support of captions, and that they will not make illegal calls.

III. Unique IP CTS Technical Attributes and Distinctions

At the same time that Ultratec supports both uniform numbering and user registration for IP-based captioned telephone users, we agree with the FCC that IP CTS raises a number of novel technical issues which the FCC has not had an opportunity to address in its current numbering proceeding. Each of these issues, resulting from the unique attributes of IP CTS, is discussed below.

A. Acquisition of Local Numbers

The FCC's Numbering Order directs TRS providers to obtain numbering resources through one of two methods: 1) if the provider is a licensed or certified carrier, then numbers may be obtained directly from the North American Numbering Plan Administrator (NANPA) or the Pooling Administrator (PA); 2) if the provider is not a carrier, then numbers may be obtained through commercial

arrangements with carriers (numbering partners).[6] The new rules also require providers to obtain "geographically appropriate NANP numbers."[7] Because Ultratec is not a traditional telephone company, numbers for IP CTS users will need to be purchased through arrangements with various numbering providers on an as requested basis. Alternatively, vendors of IP CTS, including Hamilton and Sprint, can purchase these numbers directly from NANPA or the PA.

The FCC is correct in recognizing, however, that there may be "circumstances in which an Internet-based TRS provider may not be able to obtain a geographically appropriate number for a particular end user."[8] After initial inquiries, Ultratec has already discovered that not all number providers have rate centers in all locations, and that it will not be possible to provide geographical numbers to all current IP CTS users. While the FCC has indicated that "workarounds," such as the assignment of numbers that are reasonably close to the TRS user's rate center, are permissible on a temporary basis where local numbers are not available,[9] there appear to be localities where a geographically appropriate number may simply not be available at all. Direction from the FCC as to how to handle such situations is necessary.

B. Assigning Numbers to End Users

Under the FCC's Numbering Order, IP-based TRS users may obtain a telephone number from their IP-based TRS providers once they have registered and

---

[6] Numbering Order at ¶30-31.
[7] *Id.* at ¶41.
[8] *Id.*
[9] *Id.*

chosen their default provider. This plan makes sense for individuals who are regular or even occasional users of IP-based relay. However, although there are far more potential users of IP CTS than there are of other IP Relay services, IP CTS providers have discovered that some individuals initially register with WebCaptel and try a call, but do so with no intent to return to the service. It would seem wasteful to automatically distribute numbers to every person who registers merely to try out the service, if not all of these individuals actually have an interest in using this particular brand of relay service on an ongoing basis. Ultratec recommends instead that (1) all individuals be required to register to use or try out IP CTS, but that (2) only individuals who wish to continue using the service apply for and be permitted to receive a telephone number. Such numbers, we propose, be distributed upon request of an IP CTS user; i.e., they should not automatically be distributed by providers. This will help to ensure that only users who plan to actually use the service receive numbers.

Similarly, there are times when IP CTS users may no longer need their ten-digit telephone numbers. For example, individuals may move to another jurisdiction, become deceased, or simply decide they no longer wish to use the service. Ultratec recommends that the FCC develop a process whereby Ultratec and other IP CTS providers can reclaim unused telephone numbers after a reasonable period of inactivity – for example, six months. Number reclamation is not new. When numbers go unused on the PSTN (i.e., the subscribers of these numbers stop paying their monthly telephone bills), telephone companies typically notify customers of their intent to reclaim those numbers. The telephone

subscriber, once notified, is given a period of time (e.g., 30-60 days) to contact the telephone company and confirm his or her continued interest in keeping that number. If the customer indicates a desire to continue having that number, no action is taken. But if the customer fails to contact the telephone company within the specified time, then the number is reclaimed after the designated time has expired.

In the case of IP CTS – or any IP-based relay service for that matter – the ability of a provider to reclaim numbers takes on even greater urgency. This is because, unlike numbers distributed over the PSTN, wherein telephone subscribers pay a monthly fee to have a telephone number, there may not be any fees to the customer associated with the receipt of IP-based relay numbers. Thus, there will be less incentive to cancel a number when it is no longer needed. Additionally, if a number is given out automatically and remains free to its user, the individual in possession of that number may not even realize there is an ongoing cost for that number even when it is not being used, again because there will be no cost billed to that user. Given that the cost of relay numbers is being subsidized through the Interstate TRS Fund, we propose that a number reclamation process that is similar to that which is used for the PSTN be put into place for all IP-based relay numbers, including IP CTS providers.

IV. Potential Misuse of IP CTS and Request for Further Study

As noted above, the FCC has recognized that there are distinct technical issues that have caused the FCC to refrain from extending the numbering requirements to IP captioned telephone until further exploration and information

gathering can occur. In addition to those discussed above, Ultratec is especially concerned that because of the way that WebCaptel is structured, a policy that requires the distribution of numbers free of charge to anyone could unintentionally provide an incentive for individuals who may not need this service to register for a number simply to receive free long distance calling. This is because unlike other forms of IP relay services, WebCaptel is virtually transparent to the user, i.e., parties to the call do not feel the presence of a communications assistant (CA) on their call. More specifically, WebCaptel allows parties to hear and speak to each other directly and transparently, with no CA intervention experienced. The addition of a free number, with the promise of free long distance calls associated with that number, may produce sufficient enticement for individuals who do not need this service to register on line to sign up and misuse this service.

The IP Relay industry has already had to deal with considerable misuse of its services.

IP CTS providers have been committed to developing captioned telephone practices that curb misuse to the greatest extent possible. These providers are the first to include registration and verification practices as a prerequisite to the use of their services. Given the nascent nature of the IP version of captioned telephone, however, Ultratec recommends that the FCC allot 180 days for IP CTS providers to study and develop policies that will effectively minimize fraud and abuse of IP CTS when uniform numbering is implemented for this service. During this period, IP CTS providers would also work toward resolving other technical issues unique to numbering for IP CTS, as discussed in these comments. It is important to note that

while this study is being conducted, IP CTS providers will still be able to fulfill the major objectives for which uniform numbering is required, as follows:

User registration – IP CTS providers already require all WebCaptel users to register before using this service, and will be able to comply with any new registration requirements imposed by the FCC (such as new verification procedures for registrants).

Emergency access – IP CTS providers already enable all captioned telephone users, including those who use WebCaptel, to call 9-1-1 directly and have calls returned to PSTN numbers in the event there is a disconnection. This is because whenever someone places a WebCaptel, that person must also enter a PSTN number for the receipt of the voice portion of the call. These numbers are contained in the WebCaptel database and can be retrieved as needed. IP CTS providers are also in full compliance with all requirements contained in the FCC's March 2008 Order for the interim handling of emergency IP CTS calls.[10]

Completion of point-to-point calls from other WebCaptel users – A primary reason for a central database is to enable two individuals who have video devices, but have two different VRS providers, to make direct (point-to-point) calls to each other, i.e., the central database will allow the call to be properly routed between the two providers' databases. WebCaptel users, by contrast, cannot make calls directly to other WebCaptel users without using a captioned telephone communications

[10] In the Matter of Telecommunications Relay Services and Speech-to-Speech Services for Individuals with Hearing and Speech Disabilities, E911 Requirements for IP-Enabled Service Providers, Report and Order, CG Dkt No. 03-123; WC Dkt No. 05-196, FCC 08-78 (March 19, 2008).

assistant to transcribe captions of what is said. This is because the very function of the captioned telephone service is to provide captions to callers so that they can understand what the other party is saying. If one "captioned telephone" user calls another "captioned telephone" user without going through the relay service, there would be no captions on the line and so the call would not actually be a "captioned telephone call." Otherwise stated, if two such individuals want to converse with each other, they do not need a database to complete their calls; rather they can dial each other directly over the PSTN.

Inbound calls to IP CTS relay users – A second reason that a central database is needed is for VRS and IP Relay services to enable an inbound voice caller to reach any relay user of any VRS or IP Relay provider, each of which currently has its own separate database of customer telephone numbers. By contrast, because there is currently only one database for all captioned telephone users, any person attempting to call an IP CTS user – whether from the PSTN or through another type of relay service (e.g. VRS) – will be able to easily do so because all of these calls will automatically be routed through this established database.

V. Additional Database Fields

Ultratec fully intends to become part of the central database that will be used for mapping the ten-digit telephones numbers to Internet addresses once the FCC has determined that the many unique technical issues for IP CTS are fully resolved. At such time, however, some changes may be needed to the design of that database in order to facilitate the routing and completing of WebCaptel calls. This is because of the way that a WebCaptel call is conducted. Specifically, the user initiates the

call by first logging onto a WebCaptel website. When the call is received by the WebCaptel service, the service calls back to the individual on his or her direct line (which is logged at that website during each call) and then places the WebCaptel call. Through this arrangement, the service is able to both transmit captions to the user's computer and carry the voice of the called party over the telephone network to the user's telephone. Thus, for WebCaptel, the IP CTS database needs two pieces of information in order to complete incoming calls to a WebCaptel user: the end user's IP address and the end user's North American Numbering Plan (NANP) ten-digit call-back telephone number. When, in the future, IP CTS providers are directed to provide information to the central database, it will be necessary to add fields to the central database to receive and maintain both of these pieces of information for the provision of WebCaptel.

VI. Conclusion

Insofar as all captioned telephone calls by all IP CTS providers are routed through a single internal database that has access to the telephone numbers of all end users, captioned telephone users already have many of the benefits that come with uniform numbering. Ultratec looks forward to working with the FCC over the coming months to resolve the unique issues related to numbering for IP CTS so that these users can enjoy all of remaining benefits that come with having a ten-digit geographically appropriate number.

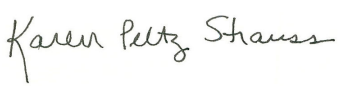
Respectfully submitted,

/s/

Pamela Y. Holmes

Director, Consumer & Regulatory Affairs
Ultratec, Inc.
450 Science Drive
Madison, WI 53711
(608) 238-5400

By:



_____

Karen Peltz Strauss
3508 Albemarle Street, NW
Washington, DC 20008
202.363.1263
Legal Consultant for Ultratec, Inc.

August 8, 2008